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November 7, 2003

The Honorable Norman Y. Mineta
Secretary
Department of Transportation
Washington, D.C. 20590

Dear Mr. Secretary:

I am writing you regarding press reports suggesting that previous industry and government funded studies may have understated the public safety consequences of a terrorist attack or an accident involving liquefied natural gas (LNG) tankers and the Distrigas LNG facility, which is located in the City of Everett, which I represent.

As you may recall, on September 26, 2001, shortly after the September 11th terrorist attacks, I wrote you to request information regarding the Department's regulatory and oversight efforts with respect to the Distrigas facility, focusing on the nature and adequacy of the security measures being undertaken by the federal government, state and local emergency responders, and the facility operator. You responded to my inquiry on October 26, 2001.

In your response you three times made reference to a study being undertaken by Quest Consultants, Inc. regarding public safety issues relating to the transportation of LNG to the Distrigas facility and the storage of LNG at the facility. On page three of your response, you noted that:

"Quest Consultants, Inc., has been hired by DOE [the Department of Energy] to perform studies related to security on vessels transporting LNG and on the onshore LNG storage tanks."

On page 10 you indicated that:

"Quest Consultants, an engineering firm, has been asked by DOE to perform a study to analyze the threat that could result from a five-meter diameter hole in an LNG tank on a vessel. Quest has performed some initial calculations to quantify the gas dispersion and fire scenarios that could follow a large release from the LNG storage tanks."

Also on page 10, you further stated that in addition to actions undertaken by the Department of Transportation to enhance security at the Distrigas facility, it was your understanding that:

“To improve security measures, DOE will work directly with the local law enforcement officials and Distrigas. MEMA [Massachusetts Emergency Management Agency] will review the studies performed by Quest and develop a plan of action. RSPA [the Department of Transportation’s Research and Special Projects Administration] will be involved in the review of the onshore plant protection security features.”

My office was subsequently provided with a copy of the Quest study and briefed on its contents. This Quest study, along with a study prepared for the facility operator by Lloyd’s Register of Shipping, which my office was also provided, has been used by the federal government and the facility operator to reassure the residents of Everett and surrounding communities regarding the potential danger of a fire and explosion at or near the Distrigas facility.

Recent press reports have called into question the accuracy of these studies and suggested that a more recent draft study being prepared by NOAA has found that the public safety consequences of a terrorist attack or accident at or near the Distrigas facility could be far more severe. According to an email I have obtained that was written by William Lehr, the author of the NOAA study:

“The maximum emissive power of an LNG pool fire is several times more than we would expect from a regular oil fire. However, The thermal radiation received falls off rapidly as you move away from the fire. It decreases much faster for foggy days than for clear days. A common danger level for thermal radiation flux in an area of public assembly is 5 kilowatts per square meter. A person exposed to this level would feel considerable pain in a few seconds. A very large unconfined LNG pool fire could possibly produce thermal radiation effects at this level or above for more than a kilometer away from the center of the fire.”

Interestingly, in the Mobile Register article, Mr. Cornwell now seems to be distancing himself from the uses of his own study, stating:

“Some of the modeling we did for DOE – in hindsight, we should have done a more complete paper. ...I’ve learned you never write anything you don’t want public. We violated our own rules on that score.”

The Register article goes on to report that Mr. Cornwell did the Quest study on short notice and that he believed that it would be employed in-house by federal agencies as one of several tools used to examine LNG fire scenarios. However, according to the Register article:

"In Boston, the Quest study – which has never been published in scientific journals – was apparently used by the DOE to suggest that a terrorist attack on an LNG tanker would result in only limited damage immediately around the ship. In stark contrast, published scientific studies have suggested that an LNG fire could have disastrous consequences for densely populated neighborhoods around Boston Harbor."

An article in today's Boston Herald further suggests that a forthcoming study by the National Oceanic and Atmospheric Administration (NOAA) indicates that the size of the fire that could result from a successful attack against an LNG tanker in Boston Harbor or at the Distrigas facility could be far greater than that assumed by either the Quest Study or the Lloyd's study prepared for Distrigas.

At the same time, Department of Energy officials are quoted in the aforementioned Mobile Register article as denying any connection to the Quest Study, stating that the Department "did not commission or release the study" and was "not involved" with the study in any way. This is a puzzling development in light of your Department's repeated reference

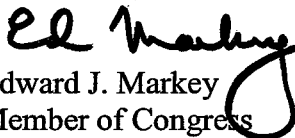
In order to clear this matter up, I am writing you at this time to request your assistance and cooperation in responding to the following questions:

1. Is it the Department's understanding that the Quest Study was performed for the Department of Energy? If not, why did you tell me so in your letter of October 26, 2001. If so, what is your understanding of the origins and purpose of this study?
2. Has the Department made use of the Quest Study in connection with its responsibilities to ensure the safety of LNG facilities and the transportation of LNG to such facilities? If so, please explain exactly how the study has been used.
3. Did the Department base any regulatory, oversight, or enforcement actions or decisions on the accident scenarios or accident consequences set forth in the Quest report or the Lloyd's report? If so, does the Department intend to revisit any of those actions or decisions or impose any new security and safety requirements on the facility operator or upon LNG tankers entering Boston Harbor? If not, what other studies or analyses did the Department base its post-September 11th actions or decisions upon?
4. The aforementioned press accounts raise serious questions about the adequacy of the Quest study, indicating that it has not been peer reviewed and is contradicted by other scientific studies of LNG fires and explosions. Are you familiar with these concerns that have been raised about this study, and if so, do you believe that it should not be used as a basis for policy decisions with respect to LNG safety?
5. The aforementioned press reports also indicate that a draft NOAA study projects hypothetical LNG fires that are much larger than those projected in either the Quest or Lloyd's reports. According to the Herald, "NOAA's study...generally sides with a more devastating scenario long portrayed by Massachusetts Institute

of Technology emeritus James Fay, said Bill Leher, a researcher on the NOAA study." The Register article further suggests that the NOAA study may be more in line with other scientific studies that have been done on this subject. Are you familiar with the NOAA study? Do you agree or disagree with its conclusions? Do you agree or disagree that the NOAA study, and the Fay studies, appear to be more in line with the scientific and technical literature on this subject? If you agree, please indicate whether you intend to make any changes in the Department's oversight or regulatory policies or actions based on this new study. If you disagree, please explain the basis for your disagreement.

Thanks again for your cooperation in this matter. I request that a response to this inquiry be provided to me within 10 working days, or no later than November 24, 2003. If you have any questions about this matter, please have your contact Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,


Edward J. Markey
Member of Congress